

IN THE CLAIMS

The listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) An injection device for use with a probe having a longitudinally-extending passageway to treat tissue of a mammalian body comprising a first tubular member and adapted for use with the probe and having a diameter for permitting insertion into the passageway of the probe, a second tubular member slidably disposed in the first tubular member, the first and second tubular members having respective proximal and distal extremities, the distal extremity of the second tubular member being provided with a needle that is extendable from the distal extremity of the first tubular member and means carried by the proximal extremities of the first and second tubular members for locking the proximal extremity of the second tubular member relative to the proximal extremity of the first tubular member, the second tubular member having a column strength when locked within the first tubular member ~~for limiting retraction of the second tubular member relative to the first tubular member~~ so as not to buckle during puncture of the tissue by the needle and thus limit retraction of the second tubular member relative to the first tubular member during puncture of the tissue.

2. (original) The device of Claim 1 wherein the needle is made from metal, the second tubular member having an elongate portion made from plastic and terminating at a shoulder, the needle being attached to the elongate portion and extending forwardly of the shoulder.

3. (original) The device of Claim 1 wherein the second tubular member is provided with a passageway, at least one optical element disposed in the passageway.

4. (original) The device of Claim 3 wherein the at least one optical element includes a first optical element for supplying light to the tissue and a second optical element for receiving light reflected back by the tissue.

5. (original) The device of Claim 3 wherein the needle has a distal face lying in a plane and the at least one optical element has an end surface inclined at the angle and lying in the plane of the distal face.

6. (original) The device of Claim 1 wherein the second tubular member extends along a longitudinal axis and the needle has a distal face inclined at an angle greater than 25 degrees relative to the longitudinal axis.

7. (original) The device of Claim 6 wherein the distal face is inclined at an angle of approximately 30 degrees relative to the longitudinal axis.

8. (original) The device of Claim 1 wherein the second tubular member extends along a longitudinal axis and the needle has a distal face inclined at an angle to the longitudinal axis, the needle being provided with a bevel which intersects the distal face to form a sharpened tip

9. (original) The device of Claim 1 further comprising a supply of at least one solution of a biocompatible composition and a biocompatible solvent coupled to the proximal extremity of the second tubular member for forming an implant in the tissue of the mammalian body.

10. (original) The device of Claim 9 wherein the biocompatible composition includes a biocompatible prepolymer.

11. (original) The device of Claim 9 wherein the at least one solution of the biocompatible composition and the biocompatible solvent has a composition comprising from about 2.5 to about 8.0 weight percent of a biocompatible polymer, from about 10 to about 40 weight percent of a water insoluble biocompatible contrast agent and from about 52 to about 87.5 weight percent of a biocompatible solvent.

12. (currently amended) An injection device for introducing a material into tissue of a mammalian body and for use with a probe having a longitudinally-extending passageway comprising a first tubular member adapted for use with the probe and having a diameter for permitting insertion of the first tubular member into the passageway of the probe, the first tubular member having a proximal extremity with a proximal opening and a distal extremity and being provided with a longitudinally-extending lumen extending from the proximal opening to the distal extremity, a second tubular member extending through the proximal opening of the first tubular member and being slidably disposed in the lumen of the first tubular member, the first and second tubular members member having respective a proximal extremity and a distal extremities, the distal extremity of the second tubular member being provided with a needle that is extendable from the distal extremity of the first tubular member, a reservoir of a solution of a biocompatible composition and a biocompatible solvent coupled to the proximal extremity of the second tubular member, the proximal extremity of the first tubular member having a port distal of the proximal opening, a reservoir of the biocompatible solvent coupled to the port for clearing any of the biocompatible composition that clogs the first tubular member distal of the port.

13. (original) The device of Claim 12 further comprising a fluid seal disposed between the first and second tubular members proximal of the port.

14. (original) The device of Claim 12 wherein the biocompatible composition includes a biocompatible prepolymer.

15. (original) The device of Claim 12 wherein the biocompatible composition includes a biocompatible polymer.

Claims 16-34. (cancelled)